

**Notice of Allowability****Application No.**

10/766,893

**Applicant(s)**

TAKAHASHI ET AL.

**Examiner**

Robert M. Pond

**Art Unit**

3625

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment(10/30/08); Examiner's Amendment (#20090106).
2. ☒ The allowed claim(s) is/are 12-14,35-37,58-60,81-83,93-98,100-107,109-116,118-125,127 and 128.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 20090106.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/Robert M. Pond/  
Primary Examiner, Art Unit 3625

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

#### ***Authorization***

Authorization for this examiner's amendment was given in a telephone interview with Jonathan Berschadsky, #46,551 on 08 January 2009.

#### ***Claims Allowed***

The following claims entered 30 October 2008 are allowed: 12-14, 35-37, 58-60, 81-83, 93-98, 100-107, 109-116, 118-125, 127 and 128. Claims 1-11, 15-34, 38-57, 61-80, 84-92, 99, 108, 117 and 126 were canceled by Applicants' amendment.

#### ***In the Claims***

The claims have been amended as follows:

Delete claims 12-14, 35-37, 58-60, 81-83, 93-98, 100-107, 109-116, 118-125, 127 and 128 in their entirety and insert therefore:

- -Claim 12. A system for diverting a quantity of in-transit units having a product number, comprising:

a terminal configured to transmit to the diversion control server product inquiry information including the product number;

a diversion control server including a processor configured to calculate a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit units having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause the quantity of in-transit units having the product number to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals; and

the terminal further configured to receive from the diversion control server the plurality of estimated time of arrivals to the at least one destination and the due date, and to transmit to the diversion control server the diversion request to cause the diversion control server to divert the quantity of in-transit units.

Claim 13. A system according to claim 12,

wherein the diversion request includes a shipping carrier identifier, the product number, the quantity, and a destination identifier; and

wherein the diversion control server is further configured to transmit to the terminal an acknowledgement that the quantity of in-transit units have been diverted to a final destination corresponding to the destination identifier.

Claim 14. A system according to claim 12 wherein the diversion control unit is further configured to:

receive a product purchase order including a product number, the quantity, and a customer identifier,

transmit to the terminal an acknowledgement that the product purchase order has been accepted, and divert the quantity of in-transit units of that product number to a final destination based on the customer identifier.

Claim 35. A method of diverting a quantity of in-transit units having a product number, the method comprising the steps of:

transmitting product inquiry information including the product number;  
calculating a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit units having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause the quantity of in-transit units having the product number to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals;

receiving the plurality of estimated time of arrivals to the at least one destination and the due date; and

transmitting the diversion request to cause the quantity of in-transit units to be diverted.

Claim 36. A method as set forth in claim 35, further comprising the steps of:

generating an acknowledgement that the quantity of in-transit units have been diverted to a final destination, wherein the diversion request includes a shipping carrier identifier, the product number, the quantity, and a destination identifier.

Claim 37. A method as set forth in claim 35, further comprising the steps of:  
receiving a product purchase order including the product number, the quantity, and a customer identifier;  
transmitting an acknowledgement that the product purchase order has been accepted; and  
diverting the quantity of in-transit units of that product number to a final destination based on the customer identifier.

Claim 58. A system for diverting a quantity of in-transit units having a product number, the system comprising:

means for transmitting product inquiry information including the product number;

means for calculating a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit units having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause the quantity of in-transit units to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals;

means for receiving the plurality of estimated time of arrivals to the at least one destination and the due date; and

means for transmitting the diversion request to cause the quantity of in-transit units to be diverted.

Claim 59. A system as set forth in claim 58,

wherein the diversion request includes a shipping carrier identifier, the product number, the quantity, and a destination identifier, and further comprising:

means for generating an acknowledgement that the quantity of in-transit units have been diverted to a final destination.

Claim 60. A system as set forth in claim 58, further comprising:

means for receiving a product purchase order including the product number, the quantity, and a customer identifier;

means for transmitting an acknowledgement that the product purchase order has been accepted; and

means for diverting the quantity of in-transit units of that product number to a final destination based on the customer identifier.

Claim 81. A computer-readable medium having stored thereon code which when executed by a computer system causes the computer system to perform:

transmitting product inquiry information including a product number;

calculating a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit unit having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause a quantity of in-transit units having the product number to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals;

receiving the plurality of estimated time of arrivals to the at least one destination and the due date; and

transmitting the diversion request to cause the quantity of in-transit units to be diverted.

Claim 82. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:

generating an acknowledgement that the quantity of in-transit units have been diverted to a final destination; and

wherein the diversion request includes a shipping carrier identifier, the product number, the quantity, and a destination identifier.

Claim 83. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:

receiving a product purchase order including a product number, the quantity, and a customer identifier;

transmitting an acknowledgement that the product purchase order has been accepted; and

diverting the quantity of in-transit units of that product number to a final destination based on the customer identifier.

Claim 93. The system according to claim 12, wherein the due date by which an allocation must be completed is based on when the quantity of in-transit units will be coded as unavailable for diversion.

Claim 94. The system according to claim 12, further comprising:

a sales history server communicatively coupled to the diversion control server and configured to collect sales history information and transmit a sales history value corresponding to one of the plurality of destinations.

Claim 95. The system according to claim 12, further comprising:

an inventory information server configured to collect inventory information and transmit to the terminal a current inventory value for one of the plurality of destinations.

Claim 96. The system according to claim 12, further comprising:

a back order information server configured to collect back order information and transmit a current back order value for one of the plurality of destinations.

Claim 97. The system according to claim 12, wherein the quantity of in-transit units is represented by a number of containers holding the plurality of in-transit units.

Claim 98. The system according to claim 97, wherein the diversion control server is further configured to transmit to the terminal a number representing how many units a container holds.

Claim 100. The system according to claim 12, wherein the diversion control server is further configured to calculate a suggested quantity of in-transit units to divert to one of the plurality of destinations.

Claim 101. The system according to claim 100, wherein the diversion control server is further configured to calculate the suggested quantity of in-transit units to divert based on historical allocation data of the plurality of destinations.



Claim 102. The method according to claim 35, further comprising the step of:  
transmitting the due date by which an allocation must be completed.

Claim 103. The method according to claim 35, further comprising the steps of:  
collecting sales history information; and  
transmitting a sales history value corresponding to one of the plurality of  
destinations.

Claim 104. The method according to claim 35, further comprising the steps of:  
collecting inventory information; and  
transmitting a current inventory value for one of the plurality of destinations.

Claim 105. The method according to claim 35, further comprising the steps of:  
collecting back order information; and  
transmitting a current back order value for one of the plurality of destinations.

Claim 106. The method according to claim 35, wherein the quantity of in-  
transit units is represented by a number of containers holding the plurality of in-  
transit units.

Claim 107. The method according to claim 106, further comprising the step of:  
transmitting a number representing how many units a container holds.

Claim 109. The method according to claim 35, further comprising the step of:  
calculating a suggested quantity of in-transit units to divert to one of the  
plurality of destinations.

Claim 110. The method according to claim 109, further comprising the step of calculating the suggested quantity of in-transit units to divert based on historical allocation data of the plurality of destinations.

Claim 111. The system as set forth in claim 58, further comprising:  
means for transmitting the due date by which an allocation must be completed.

Claim 112. The system as set forth in claim 58, further comprising:  
means for collecting sales history information; and  
means for transmitting a sales history value corresponding to one of the plurality of destinations.

Claim 113. The system as set forth in claim 58, further comprising:  
means for collecting inventory information; and  
means for transmitting a current inventory value for one of the plurality of destinations.

Claim 114. The system as set forth in claim 58, further comprising:  
means for collecting back order information; and  
means for transmitting a current back order value for one of the plurality of destinations.

Claim 115. The system as set forth in claim 58, wherein the quantity of in-transit units is represented by a number of containers holding the plurality of in-transit units.

Claim 116. The system as set forth in claim 115, further comprising:

means for transmitting a number representing how many units a container holds.

Claim 118. The system as set forth in claim 58, further comprising:  
means for calculating a suggested quantity of in-transit units to divert to one of the plurality of destinations.

Claim 119. The system as set forth in claim 118, further comprising:  
means for calculating the suggested quantity of in-transit units to divert based on historical allocation data of the plurality of destinations.

Claim 120. Computer-readable medium according to claim 81, wherein the date by which an allocation must be completed is based on when the quantity of in-transit units will be coded as unavailable for diversion.

Claim 121. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:  
collecting sales history information; and  
transmitting a sales history value corresponding to one of the plurality of destinations.

Claim 122. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:  
collecting inventory information; and  
transmitting a current inventory value for one of the plurality of destinations.

Claim 123. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:

collecting back order information; and

transmitting a current back order value for one of the plurality of destinations.

Claim 124. Computer-readable medium according to claim 81, wherein the quantity of in-transit units is represented by a number of containers holding the plurality of in-transit units.

Claim 125. Computer-readable medium according to claim 124, having stored thereon code which causes the computer system to perform:

transmitting a number representing how many units a container holds.

Claim 127. Computer-readable medium according to claim 81, having stored thereon code which causes the computer system to perform:

calculating a suggested quantity of in-transit units to divert to one of the plurality of destinations.

Claim 128. Computer-readable medium according to claim 127, having stored thereon code which causes the computer system to perform:

calculating the suggested quantity of in-transit units to divert based on historical allocation data of the plurality of destinations.--

***Examiner Note***

Regarding method claims, "transmitting" is interpreted to be tied to a computing apparatus as disclosed by the instant specification.

***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

This invention relates generally to computer software systems and, more particularly, to diverting a plurality of in-transit units with multiple destinations for a product to at least one destination.

Pertaining to claim 35. The claimed invention provides a computer-based method by which a user makes an inquiry about a particular in-transit product by product code and receives a plurality of estimated time of arrivals (ETAs) to a plurality of destinations of in-transit units having the particular in-transit product. The system provides the user with a due date associated with the multiple ETAs to multiple destinations by which a diversion request must be completed to cause the in-transit units having the product of interest be diverted to at least one destination. Neither the previously cited prior art nor closest prior art noted below alone or in combination with other prior art teach and suggest the combinations of methods as claimed.

Pertaining to claims 12, 58 and 81. Reasons for allowance for claims 12, 58 and 81 are based on the rationale as noted above. System claim 58 is narrower than system claim 12, both which provide functionality of claim 35. Computer-readable medium claim 81 tangibly embodies code when executed by a processor causes the computer to perform the methods of claim 35.

Closest US Patent/US Patent Publication

Scone (US 7,222,081) relates to a delivery scheduling system which can continuously monitor and update a delivery schedule for a shipper and can notify a customer of a scheduled delivery. The system allows a customer to access an estimated delivery schedule time via a communication means prior to receiving a delivery alert. Using a browser-based client, the customer may view a current estimated delivery time and if the delivery is still waiting to be delivered, the customer may then submit a request to change a delivery parameter such as delivery time or location. If the customer requests a change to the delivery parameters, the system determines if the request has created a change in the shipper's overall delivery schedule and if the change is in the delivery time, the program reschedules the delivery sequence and re-calculates the estimated delivery times for the remaining deliveries accordingly. Scone, however, fails to teach and suggest calculating a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit units having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause the quantity of in-transit units having the product number to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals.

Search updates including forward and backward citations of Scone failed to produce closer prior art or prior art that in combination with Scone would teach and suggest the claimed invention. Emphasis was also placed on patent and

patent publications from known transportation companies, for example UPS, USPS, Federal Express (FedEx), DHL, RPS and Airborne. Neither Scone alone nor in combinations with other prior art or prior art noted below teach and suggest the combinations of methods as claimed.

Closest Non-patent Literature

Dilger discloses global logistics issues and the use of technology to integrate enterprise systems with supply chain systems for more efficient handling of product shipments. Dilger further teaches estimating arrival dates and diverting product to other warehouses as corrective action for delayed arrival times. Dilger, however, fails to teach and suggest calculating a plurality of estimated time of arrivals to a plurality of destinations for a plurality of in-transit units having the product number and a due date associated with the plurality of estimated time of arrivals by which a diversion request must be completed to cause the quantity of in-transit units having the product number to be diverted to at least one destination, wherein the diversion request is based in part on the calculated estimated time of arrivals. Neither Dilger alone nor in combinations with other prior art or prior art noted above teach and suggest the combinations of methods as claimed.

***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Pond whose telephone number is 571-272-6760. The examiner can normally be reached on 8:30AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeff Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert M. Pond/  
Primary Examiner, Art Unit 3625  
January 8, 2009